

BOARD OF SUPERVISORS

ACTION ITEM

SUBJECT: Amendment to FY 09 Budget Adjustment - BA-093515
Purchase of a Replacement Public Safety Radio Communication System

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: December 18, 2008

STAFF CONTACTS: John Pumphrey, Information Technology
Sandra Lineberry, Management and Financial Services

RECOMMENDATIONS:

Staff: Staff recommends that the Board of Supervisors approve Budget Adjustment BA-093515, which advances funding adopted in the FY10 Computer System Replacement Fund and appropriates \$29,000,000 in capital lease financing in FY09 for the purchase of a replacement Public Safety Radio Communications System.

Board of Supervisors: At the December 8, 2008 Public Hearing, the full Board of Supervisors voted 8-0-1(Chairman York absent) to forward the Intent to Amend the FY09 Budget Adjustment BA-09351539 to the December 18, 2008 Reconvened Business Meeting for further discussion and to call a Special Meeting, if needed.

BACKGROUND: On December 2, 1998, the Board of Supervisors authorized the Purchasing Agent to award a contract for the design, construction, and maintenance of a “turnkey” Public Safety Radio System to Motorola, Inc.

History.—The Loudoun County Public Safety Radio System became operational in March 2002 serving the following:

- the Sheriff’s Office;
- the Department of Fire, Rescue and Emergency Management
- 17 Loudoun Volunteer Fire and Rescue Companies;
- the Department of Animal Care and Control; and
- ,the Town of Leesburg Police Department,
- the Town of Middleburg Police Department; and
- the Town of Purcellville Police Department.

The System also serves to support the National Capital Response Plan and the Washington Council of Governments Member Localities by ensuring interoperability with the county’s mutual aid partners.

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The capacity of the system was increased in September 2004 to add an additional three (3) channels to accommodate the growth in users. In addition to the 800 MHz voice radio system, a three (3) channel UHF 488 MHz mobile data radio system (i.e., vehicle laptop computers and other hardware) also became operational in March 2002. The mobile data system today supports approximately 350 mobile data users in the Office of the Sheriff, and the Department of Fire, Rescue and Emergency Management will have approximately 150 users on the system by the end of FY09.

In September 2003, Motorola advised the County that the current voice radio system would only be supported by Motorola through December 2009. The Department of Information Technology (DIT) requested a budgetary estimate from Motorola in August 2005 for the replacement cost of the system. The estimated costs were first included in the FY 2006 Budget as part of the Computer System Replacement Fund. The estimated cost for replacement was reflected as an appropriation in FY 2010.

CTA.—In May 2008, the County contracted with CTA Communications (CTA) of Lynchburg Virginia to perform a needs assessment, develop functional specifications, provide procurement assistance, and provide implementation oversight in replacing the system. CTA Communications assisted the County during the original 800 MHz systems implementation and has extensive knowledge of the County system. CTA completed the assessment phase of the project on October 31, 2008 (Attachment 1).

New System.—The newly-proposed system incorporates technology changes mandated by the Federal Communications Commission that maximize available radio spectrum, and will require an additional tower site to maintain current voice radio system coverage. The tower, located at the North Sterling Safety Center will also provide improved in-building coverage in the Cascades and Lowes Island area. Many of these technological mandated changes were a direct result of the communications issues beset upon first responders that took action during 9/11.

Motorola advised the County in July 2008 that in order to complete the new tower site and replace the radio system equipment at the existing eight tower sites, they must begin work on the voice system in early 2009 to be able to do the required coverage testing by October 1, 2009. The coverage test must be completed during full foliage.

The project also includes the following components:

- a replacement of the current Mobile Data System,
- Microwave Radio backbone used to link all of the towers together, and
- the low band paging system used to alert the County's 17 volunteer Fire and Rescue companies and their volunteer members.

It is important to note that each of these systems is either at the end of product life or has reached capacity and needs to be expanded.

Mobile Data System.—This project addresses the Mobile Data Radio System. The Mobile Data Radio modems (i.e., communication devices within vehicles) utilized by the Sheriff's Office, the Purcellville Town Police, the Middleburg Town Police, and the Department of Fire, Rescue, and Emergency Management are being discontinued by Motorola and will no longer be available after March 2009.

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The replacement Mobile Data will provide a ten (10) fold increase in data capacity and also add three (3) additional data channels. This will allow more essential data to be transferred to vehicles in the field that assist with law enforcement and general public safety efforts (i.e, Virginia Crime Information, DMV data, etc).

Microwave Radio Backbone.—This project also addresses the microwave radio backbone. The current microwave system capacity needs to be increased to support the growing requirements of the following systems:

- County's 800 MHz radio system,
- the County's Mobile Data System,
- the School Radio System.

Security equipment at each of the sites will be upgraded also.

Additionally, two (2) of the existing monopole tower sites which are connected with commercial data services from Verizon and are not currently served by the microwave will be added to the microwave. This project also creates a redundant "loop" linking all existing tower sites so if a link is interrupted the tower will stay in service.

Low Band Paging System.—The replacement low band paging system will replace radio transmitters which were built in 1987 and purchased in the mid 1990's as part of an interim plan to improve the volunteer radio alerting system. These pagers directly assist communication with all members of the Loudoun County Volunteer Fire and Rescue System, in addition to other agencies.

Testing and Coverage Analysis.—Staff from DIT, Fire, Rescue and Emergency Management, the Sheriff's Office, Management and Financial Services, the County Attorney's Office, and engineers from CTA have been working with Motorola reviewing coverage maps, conducting tower site surveys, and examining procurement contracts in an effort to complete the replacement of the critical system components and also to incorporate the other system replacements needed by December 2009.

Funding and Budget Authority.—Funding for the system was initially included in the Computer System Replacement Fund for FY 2010. Staff requests that the Board consider a budget adjustment (BA) to move the funding for the project to FY 2009 to allow a contract award in December 2008. This BA required a Public Hearing, which was held on December 8, 2008 allowing for a contract award to occur prior to December 31, 2008.

Motorola's cost proposal for the system replacement was received on November 10, 2008 in the amount of \$33,751,130 and includes a "discount" of \$4,907,097 for a total cost of \$28,844,033, if the County awards the contract prior to December 31, 2008. If the contract is not awarded by December 31, 2008, the cost for the system will be \$32,711,530, which exceeds the amount budgeted for the project by \$3,711,530.

On December 2, 2008, the Board of Supervisors voted 7-2 (Delgaudio and York opposed) to authorize the Purchasing Agent to negotiate and award a contract for the construction and maintenance of a Public Safety Radio Communications System to Motorola, Inc. in the amount of \$28,844,033 for the replacement of the system and \$7,946,421 for hardware, software and maintenance services for years two (2) through six (6) for a total contract award amount of \$36,790,454 utilizing the Stafford County contract.

ISSUES:

Controller Obsolescence and Potential Failure.—Motorola can only provide “best effort” repair of the radio system controllers that are at the “heart” of the communications system after December 31, 2009. These controllers are at each of the eight (8) radio communications towers in the communications system. It is important to note that should a controller fail, the site will be inoperable until replacement components can be located and replaced. Motorola cannot provide a guaranteed “return to service” as component parts are no longer manufactured and must be located in the used equipment market. In order to insure uninterrupted service of the Public Safety Radio System, replacement work must be completed before December 31, 2009.

Riding Stafford Contract.—Staff recommends the use of the Council of Government (COG) Rider clause under the Stafford County contract which was competitively bid. Under the rider clause, the terms and conditions, including pricing are extended to other public bodies. This is a common practice that is allowed under the Commonwealth of Virginia Public Procurement Act (VPPA). It is an efficient and cost effective way for the local governments to do business.

The basis for the staff decision to utilize the Stafford County rider clause is because the contract is for a Motorola Radio System. If Loudoun County deploys a non-Motorola Radio System, direct interoperability with all neighboring Motorola legacy systems will not be possible unless infrastructure that bridges each of these legacy systems is placed in service and this may not be a functional, or a viable option. Riding contracts usually provides efficiencies and like, or similar specifications, especially across the Region where mutual aid is paramount. This is the case for riding contracts on fire apparatus.

FISCAL IMPACT: Initial funding for the Public Safety Radio Communications System was appropriated in FY 2008 and FY 2009, for a total of \$479,000 in capital lease financing. The balance of \$29,000,000 was approved for appropriation in FY 2010 per the adopted FY 2009 Fiscal Plan, and debt service for the radio system was included in the Computer System Replacement Fund line item in the adopted *Schedule of Major Financings (Adopted FY09-14 Capital Improvement Program)*.

As stated above, if the contract is not awarded by December 31, 2008, the cost for the system will be \$32,711,530, which exceeds the amount budgeted for the project by \$3,711,530.

The attached *Debt Service Scenarios (I & II)* illustrates the estimated total debt service for the radio system given the full \$32,711,530 purchase price, and the discounted \$28,844,033.

Regardless of the purchase price approved by the Board, an estimated maximum of \$245,336 in debt service for the System will be expended for FY 2009. There are sufficient funds in the debt service fund to cover this incremental level of expenditures in FY 2009. In addition, sufficient monies have been approved in future fiscal year debt service to allow for the \$29,000,000 in capital lease financing in FY09 for the purchase of a replacement Public Safety Radio Communications System.

DRAFT MOTIONS:

1. I move that the Board of Supervisors approve Budget Adjustment BA-093515, which amends the FY09 Adopted Budget and appropriates \$29,000,000 in FY09 for the purchase of a replacement Public Safety Radio Communications System.

or

2. I move an alternate motion.

ATTACHMENTS:

Attachment 1.—CTA Profile and Prior Experience

Attachment 2.--Debt Service Scenarios (I & II)

Attachment 3.—FY 09 Adopted Fiscal Plan, Volume 2

Schedule of Major Financings, Pages 8-7

Computer System Replacement Fund, Pages 9-8 to 9-9

Attachment 4.—Answers to 12/8/08 Questions Emailed to Chairman York and Board

Attachment 5.—Loudoun County Interoperability Commitment Powerpoint Presentation

Attachment 6.—Stafford County Sheriff Contract Award

Attachment 7.—Loudoun County System Components